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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,735	05/23/2001	Naishin Seki	JA9-2000-0085 (8728-516)	9928
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EXAMINER DANNEMAN, PAUL				
ART UNIT		PAPER NUMBER		
3627				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/863,735

Applicant(s)

SEKI ET AL.

Examiner

PAUL DANNEMAN

Art Unit

3627

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 5, 7, 8 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 7-8 and 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Amendment

1. Applicants have amended Claims 1, 3 and 5.
2. Claims 2 and 6 have been canceled and Claims 4 and 9-19 were previously canceled.
3. Claims 1, 3, 5, 7-8 and 20-25 are pending and have been examined in this action.

Response to Arguments

4. The objection to Claim 3 for informality is respectfully withdrawn as applicants have amended the claim.
5. Applicants argue with respect to the rejection of the independent claims 1 and 5 under 35 USC § 103(a) that ***“Herz does not teach or suggest ‘wherein said dependency element determines the current retail price, a lowest price and a highest price of said product independently from information corresponding to a current user’ as claimed in Claim 1 and essentially as claimed in Claim 5.”*** Respectfully, the Examiner must disagree as Herz in paragraph [0003] clearly discloses that the object of their invention is to determine the optimal price based on consumer demand, that is, of the sales volume that the vendor will enjoy at each possible price. Herz further discloses that depending on the consumers' demand curve, a given price reduction may or may not increase the vendor's sales enough to compensate for the associated reduction in profit margin. Applicant's specification in paragraphs [0018-0020] clearly discloses the elements of demand curve pricing (price trends, sales information, price of the product, quantity sold, incremental demand, etc.) being used to price a product.
6. Regarding Claims 1 and 5, the applicants further argue ***“Consider that the object of the invention in Herz is to present a customer with a customized offer that will maximize profits. In Claims 1 and 5, the highest price acts as a ceiling to prevent the price of a product from increasing endlessly... Indeed, maximizing profits, as taught by Herz, clearly contradicts setting a highest price as claimed in Claims 1 and 5.”*** Respectfully, the Examiner must disagree for two reasons, firstly Claims 1 and 5 recite ***“setting a lowest price and a highest price”*** and secondly

Applicant's specification in paragraph [0021] clearly discloses **"a method for setting a price in accordance with the number of products sold can be employed to increase the profit provided by a product that is selling well and for providing a competitive price provided by a product that is not selling well."** These are all objectives of a demand curve and price pointing; please see the definition of Demand Curve in Wikipedia.

7. Applicants further argues that ***"The combination of Herz, Freeny and Kaminsky teaches a product pricing system that maximizes profit per shopper using individualized pricing in the context of an auction."*** Respectfully the Examiner must disagree, **'Herz discloses the automatic determination of customized prices and promotion based on a demand curve for a group of shoppers, Freeny discloses the use of sales and inventory information to dynamically set pricing and Kaminsky teaches a concurrent dynamic pricing, marketing and selling system to sell excess, returned, and slow moving inventory.'**

8. The Examiner has carefully considered Applicants' arguments, however they are not persuasive therefore Claims 1 and 5 and their independent claims are properly rejected and remain rejected.

Claim Rejections - 35 USC § 103

9. **Claims 1, 3, 5, 7-8, and 20-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al. (US 2001/0014868) hereafter known as Herz, in view of Freeny, Jr. (US 6,076,071) hereafter known as Freeny, and further in view of Kaminsky et al. (US 2001/0047308) hereafter known as Kaminsky.

Claims 1 and 5:

With regard to the limitations of a server:

- ***Retail Sales State Management means for managing retail sales state information for a product (sales history, purchase time and purchase price);***

- ***Price Setting means for determining a dependency element from a group of elements associated with a price determination policy and price trend table and dynamically setting a current retail price;***
- ***Wherein said dependency element determines the current retail price, a lowest price and a highest price of said product independently from information corresponding to a current user;***
- ***Product information provision for responding to user information requests for a product with current retail price of product and product information***

Herz shows, in FIG.1, FIG.2, FIG.4, FIG.5A, and FIG.5B a system for the automatic determination of customized prices and promotions. The primary functions of the system for the automatic determination of customized prices and promotions (price setting means) 100 are:

- 1) To identify offers that are appropriate for each group of shoppers,
- 2) To help the shoppers become informed about these available offers (product information provision means), and
- 3) To facilitate any or all of the necessary transactions, such as electronic ordering or payment (retail means), if the shoppers decide to accept an offer.

Herz further discloses in at least paragraph [0029 and 0032] demographic and/or consumer information about the shopper or similar shoppers is obtained from other databases, e.g., from a consumer database purchased from a credit-card company, or a database that correlates the response to telemarketing campaigns with demographic variables.

Herz in at least paragraph [0005] discloses that offers can be profiled using possible attributes that include the newness and advertised duration of the offer, type of product or service being offered, the product's brand name and features, the shoppers who tend to buy the product, other products frequently bought on the same shopping trip, the sales pitch, the price and terms of payment, any discounts provided, and the relative attributes of competing offers. Therefore, the offers can be profiled based on attributes of the offer exclusive of the shopper.

The main computer selects offers (paragraphs [0005 and 0162]) from the offer database that are likely to result in profitable sales (price trend means, basic rule of supply and demand). "Retail sales state information" and means for managing it, as vaguely defined in applicant's specification, is shown throughout the reference in demand curves and more specifically in paragraph [0301], which states, "Time series methods are also useful for detecting trends: one could do a linear regression on sales for a certain product over time, determining the overall direction of a product's sales. This information could be used to adjust offer-generating strategies, as it would indicate a waxing or waning of a customer's overall interest in a given product." While the price may be reset and changed with time in Herz's system, it is not specifically disclosed that pricing is dynamically set per se, however Herz in at least paragraph [0022, 0024 and 0027] further discloses the automatic determination of customized prices and promotions by using a plurality of databases, including, but not limited to: shopper database, offer database, shopper profile database, and shopper history database. Herz in at least paragraph [0276] further discloses making dynamic offers to a customer at a particular price and having additional offers at a new price where the previous offer was rejected.

Herz does not disclose that any trend information regarding the pricing is displayed to the user. Herz in at least paragraph [0246] discloses the use of parameterized offers using price, a size, a price presentation, a sales pitch, an advertisement's visual style, etc. Herz in at least paragraph [0262] further discloses a shopper's records of purchases being used to generate promotions including price discounts, advertisements, or a shopping list.

However, Freeny in at least Column 3, lines 42-60 discloses a system which receives sales and inventory data and data from other sources to automatically change product prices. Freeny in at least Column 3, lines 66-67 and Column 4, lines 1-13 further discloses that product prices are dynamically adjusted at the checkout station, on message displays within the store, and etc. Freeny in at least Column 7, lines 63-67 and Column 8, lines 1-5 further discloses that the system detects the rate of purchase of each product and compares it to a predetermined limit and the price of each product is automatically adjusted upwards or downwards. Freeny in at least

Column 8, lines 6-17 still further discloses that the system can automatically, based on the reduced supply of product, adjust the price of a product. Freeny does not specifically disclose providing the user with any pricing trend information.

Kaminsky in at least paragraph [0020] discloses a system that permits a merchant to dynamically price a single product, a group of products or an entire website. Kaminsky in at least paragraph [0035] and Figure 3 further discloses a user being provided with price trend information.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Herz so as to set the price of a product dynamically as taught by Freeny and to display the price trend information to the user in accordance with the teachings of Kaminsky, in order to generate more sales by urging the buyer to act quickly by giving the sense that the price being offered is a good deal and that it would not last for long.

Claims 3, 7-8 and 20-21:

With regard to the limitations:

- ***Price determination policy specified conditions and parameters for dynamically changing the retail price of a product according to a number of units sold;***
- ***Where the retail price of the product increases as the number of units sold increases;***
- ***Where the retail price of the product decreases as the number of products sold decreases.***

Herz in at least paragraph [0244] discloses an alternate method for automatically selecting and presenting a spectrum of different price values to ascertain the price/demand relationship, but does specifically disclose the usage of the price/demand relationship to dynamically change the retail price of a product. Freeny in at least Column 3, lines 41-60 discloses utilizing sales and inventory data, pricing and advertising data provided by the product supplier and competition price data to automatically change product prices at the physical store systems. Freeny in at least Column 7, lines 63-67 and Column 8, lines 1-17 further discloses dynamically adjusting the

price of a product based on the rate of purchase (demand) for the product. The system computer can automatically increase the price of the product based on the reduced supply of the product on the shelf or in inventory. The system computer can automatically decrease the price of a product if the rate of purchase of a product falls below a predetermined limit. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Herz so as to set the price of a product dynamically as taught by Freeny with the motivation of encouraging the sale of slow moving items while maximizing the profit generated from fast moving items.

Claims 22-25:

With regard to the limitations:

- ***Price determination policy specifies the conditions and parameters for changing the retail price according to a product's ranking information;***
- ***Where retail price increases as a product ranking increases;***
- ***Where retail price decreases as a product ranking decreases;***
- ***Where the ranking information is based on a retail sales ranking of the product or its popularity ranking.***

Herz in at least paragraph [0240] discloses that profit is equal to the quantity sold times the profit per unit. Herz in at least paragraph [0241] discloses making incremental changes in a product offering by varying the price up or down by a particular amount and floating the new offer to see whether it increases profits (quantity sold is directly related). Herz in at least paragraph [0243] further discloses the ranking of offers based on shopper interest in the offer. Freeny does not specifically address these limitations.

Kaminsky in at least paragraphs [0019, 0020 and 0021] discloses a dynamic pricing system where a buyer is permitted to request a lower price for an item than its current price.

Regarding ranking the popularity or evaluations of the products, while the pricing in Herz, Freeny and Kaminsky can be set based on the popularity of the items; the references do not specifically

disclose ranking the items based on popularity or evaluations of the products. However, ranking items on the basis of their popularity or evaluations, then setting a price based on the ranking of a list of products for sale, is old and well known (Prior Art admitted under OFFICIAL NOTICE). Therefore it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have further modified the system of Herz so as to rank the items for sale in order of their popularity or evaluations, and set the price in accordance with the rank, as it is well known to do so, in order to generate more revenue by charging higher prices for more popular items.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/

Examiner, Art Unit 3627

/F. Ryan Zeender/

Supervisory Patent Examiner, Art Unit 3627